

IN THE CLAIMS:

Please cancel claims 25-39 and 52-55 without prejudice, and amend the claims as follows:

1. (Currently Amended) A method of processing a substrate, comprising:
~~introducing a~~ exposing the substrate into an to a phosphoric acid based electrolyte solution, wherein the phosphoric acid based electrolyte solution further comprises a corrosion inhibitor and a chelating agent;
forming a passivation layer on a substrate surface;
~~polishing~~ contacting the substrate surface with a polishing article in [[an]] the electrolyte solution;
applying an anodic bias to the substrate surface; and
removing material from at least a portion of the substrate surface.
2. (Currently Amended) The method of claim 1, wherein the passivation layer is a current suppressing layer ~~formed by exposing a substrate surface to an electrolyte comprising one or more of a corrosion inhibitor, a leveling agent, or combinations thereof.~~
3. (Original) The method of claim 2, wherein the corrosion inhibitor comprises an organic compound containing an azole group selected from the group of benzotriazole, mercaptobenzotriazole, 5-methyl-1-benzotriazole, and combinations thereof.
4. (Currently Amended) The method of claim ~~[[2]]~~ 1, wherein the phosphoric acid based electrolyte solution further comprises a leveling agent ~~[[is]]~~ selected from the group of polyethylene glycol, polyethylene glycol derivatives, and combinations thereof.

5. (Currently Amended) The method of claim 1, wherein the passivation layer is formed by ~~disposing the substrate in an electrolyte containing~~ a viscous forming agent.
6. (Original) The method of claim 5, wherein the viscous forming agent comprises a phosphate-based compound or a phosphorus acid based compound.
7. (Original) The method of claim 6, wherein the viscous forming agent comprises phosphoric acid, copper phosphate, or potassium phosphate.
8. (Currently Amended) The method of claim 1, ~~wherein the passivation layer is formed by depositing a dielectric or organic material on the substrate surface~~ further comprising providing relative motion between the substrate and the polishing article when contacting the substrate with the polishing article.
9. (Currently Amended) The method of claim 1, wherein ~~the passivation layer comprises silicon oxide~~ applying the anodic bias to the substrate surface comprises biasing the polishing article and contacting the substrate to the polishing article.
10. (Currently Amended) The method of claim 1, wherein the phosphoric acid based electrolyte solution comprises ~~electrolyte is selected from the group of sulfuric acid based electrolytes, phosphoric acid based electrolytes, sulfuric acid based electrolyte derivatives, or phosphoric acid based electrolyte derivatives, and combinations thereof.~~
11. (Currently Amended) The method of claim ~~[[10]]~~ 1, wherein ~~the electrolyte~~ the phosphoric acid based electrolyte solution further comprises abrasive particles.
12. (Original) The method of claim 1, wherein applying the bias to the substrate comprises applying a voltage between about 0.1 volts and about 15 volts.

13. (Currently Amended) The method of claim 1, wherein the polishing article exerts a pressure on the substrate of about 2 psi or less during polishing.

14. (Currently Amended) The method of claim ~~[[2]]~~ 1, wherein the corrosion inhibitor, leveling agent, or combinations thereof, comprise between about 0.005 vol% and about 10 vol% of the electrolyte.

15. (Currently Amended) A method of processing a substrate, comprising:
positioning the substrate in ~~[[an]]~~ a phosphoric acid based electrolyte solution adjacent a polishing article disposed in the electrolyte;

exposing the substrate to a corrosion inhibitor, ~~a leveling agent, a viscous forming agent, or combinations thereof,~~ and a chelating agent disposed in the phosphoric acid based electrolyte solution;

~~to form~~ forming a current suppressing layer on a substrate surface;

~~polishing~~ contacting the substrate in the electrolyte solution with the polishing article to remove at least a portion of the current suppressing layer;

applying a bias between ~~an anode~~ the polishing article contacting the substrate and a cathode disposed in the electrolyte solution; and

removing material from at least a portion of the substrate surface with an anodic dissolution process.

16. (Original) The method of claim 15, wherein applying the bias comprises controllably applying a time varying anodic potential to the substrate surface.

17. (Original) The method of claim 15, wherein the bias applied between the anode and the cathode is between about 0.1 volts and about 15 volts.

18. (Currently Amended) The method of claim 15, wherein the phosphoric acid based electrolyte solution comprises ~~electrolyte is selected from the group of sulfuric acid based electrolytes, phosphoric acid based electrolytes, sulfuric acid based~~

~~electrolyte derivatives, or phosphoric acid based electrolyte derivatives, and combinations thereof.~~

19. (Original) The method of claim 15, wherein the corrosion inhibitor comprises an organic compound containing an azole group selected from the group of benzotriazole, mercaptobenzotriazole, 5-methyl-1-benzotriazole, and combinations thereof.

20. (Currently Amended) The method of claim 15, wherein ~~[[the]]~~ the phosphoric acid based electrolyte solution further comprises a leveling agent ~~[[is]]~~ selected from the group of polyethylene glycol, polyethylene glycol derivatives, and combinations thereof.

21. (Currently Amended) The method of claim 15, ~~wherein the viscous forming agent comprises a phosphate-based compound or a phosphorus acid-based compound~~ further comprising providing relative motion between the substrate and the polishing article when contacting the substrate with the polishing article.

22. (Currently Amended) The method of claim 21, ~~wherein the viscous forming agent comprises phosphoric acid, copper phosphate, or potassium phosphate~~ applying the bias comprises controllably applying a time varying anodic potential to the substrate surface.

23. (Currently Amended) The method of claim 15, wherein the corrosion inhibitor, ~~leveling agent, viscous forming agent, or combinations thereof,~~ comprises between about 0.005 vol% and about 10 vol% of the electrolyte solution.

24. (Currently Amended) The method of claim 15, wherein the electrolyte solution further comprises abrasive particles.

25-39. (Cancelled)

40. (Currently Amended) A method of processing a substrate, comprising:
positioning the substrate in an electrolyte solution adjacent a polishing article
~~disposed in the electrolyte, wherein a portion of a substrate surface comprises a~~
conductive material and the electrolyte solution comprises:

~~selected from the group of sulfuric acid based electrolytes, phosphoric acid based electrolyte; s, sulfuric acid based electrolyte derivatives, phosphoric acid based electrolyte derivatives, and combinations thereof; the electrolyte solution further comprising~~

~~one or more corrosion inhibitors selected from the group of benzotriazole, mercaptobenzotriazole, 5-methyl-1-benzotriazole; and~~

~~one or more chelating agents selected from the group of tetraethylenepentamine, triethylenetetramine, diethylenetriamine, ethylenediamine, amino acids, ammonium oxalate, ammonia, ammonium citrate, citric acid, and ammonium succinate;~~

forming a current suppressing layer;

~~polishing~~ contacting the substrate in the electrolyte solution with the polishing article to remove at least a portion of the current suppressing layer and expose a portion of the conductive material;

~~applying a bias between an anode and a cathode disposed in the electrolyte solution; and~~

~~removing material from at least a portion of the substrate surface with the~~
exposed portion of the conductive material by anodic dissolution and mechanical contact with the polishing article.

41. (Currently Amended) The method of claim 40, ~~wherein the electrolyte solution further comprises a viscous forming agent comprising a phosphate based compound or a phosphorus acid based compound, to form a current suppressing layer on a substrate surface~~ further comprising providing relative motion between the substrate and the polishing article when contacting the substrate with the polishing article.

42. (Currently Amended) The method of claim 41, wherein ~~the viscous-forming agent comprises phosphoric acid, copper phosphate, or potassium phosphate~~ applying the bias comprises controllably applying a time varying anodic potential to the substrate surface.

43. (Previously Presented) The method of claim 42, further comprising a leveling agent selected from the group of polyethylene glycol, polyethylene glycol derivatives, and combinations thereof.

44. (Currently Amended) The method of claim 43, wherein the corrosion inhibitor, leveling agent, viscous-forming agent, or combinations thereof, comprises between about 0.005 vol% and about 10 vol% of the electrolyte.

45. (Previously Presented) The method of claim 40, wherein the electrolyte further comprises abrasive particles.

46. (Currently Amended) A method of processing a substrate, comprising:
introducing a substrate into ~~[[an]]~~ a phosphoric acid based electrolyte;
forming a passivation layer on a substrate surface by exposing a substrate surface to ~~an electrolyte comprising one or more corrosion inhibitors and one or more chelating agents~~ disposed in the phosphoric acid based electrolyte;
~~polishing~~ contacting a polishing article with the substrate in the electrolyte solution;
applying an anodic bias to the substrate surface by biasing ~~[[a]]~~ the polishing article ~~and positioning the substrate in contact with the polishing article;~~ and
removing material from at least a portion of the substrate surface.

47. (Previously Presented) The method of claim 46, wherein the electrolyte is ~~selected from the group of sulfuric acid based electrolytes,~~ comprises phosphoric acid

~~based electrolytes, sulfuric acid based electrolyte derivatives, or phosphoric acid based electrolyte derivatives, and combinations thereof.~~

48. (Previously Presented) The method of claim 47, wherein the one or more corrosion inhibitors comprises an organic compound containing an azole group selected from the group of benzotriazole, mercaptobenzotriazole, 5-methyl-1-benzotriazole, and combinations thereof.

49. (Previously Presented) The method of claim 48 wherein the one or more chelating agents are selected from the group of tetraethylenepentamine, triethylenetetramine, diethylenetriamine, ethylenediamine, amino acids, ammonium oxalate, ammonia, ammonium citrate, citric acid, and ammonium succinate.

50. (Previously Presented) The method of claim 49, wherein the electrolyte further comprises a leveling agent selected from the group of polyethylene glycol, polyethylene glycol derivatives, and combinations.

51. (Previously Presented) The method of claim 49, wherein the electrolyte further comprises abrasive particles.

52-55. (Cancelled)